

Applicant: Hee-Boong Park
Application No.: 10/540,819

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) An apparatus for an ultrasonic examination of a deformable object, comprising: a supporting frame; a movable means having a flat surface with rigidity widthwise, the deformable object being placed on the flat surface, the movable means being installed in the frame to move forward and rearward at a certain moving distance in a longitudinal direction of the frame; a driving means for moving the movable means forward and rearward; and at least one ultrasonic probe disposed to extend widthwise of the movable means, a ultrasonic wave transmission/reception surface of the ultrasonic probe being substantially flush with an upper surface of the movable means, the ultrasonic probe being fixed to the movable means at a position inward from longitudinal both ends of the movable means by a distance smaller than the moving distance of the movable means.

2. (Original) The apparatus according to Claim 1, wherein the movable means comprises a caterpillar consisting of a plurality of links each of which has a

Applicant: Hee-Boong Park
Application No.: 10/540,819

flat surface, a pair of rollers for internally supporting both longitudinal ends of the caterpillar, and a pair of supporting members for supporting both lateral sides of the caterpillar, at least one of the pair of the rollers is interlocked with the caterpillar to move the caterpillar in response to the rotation of the roller, the driving means is coupled to and rotates the interlocked roller, and the at least one ultrasonic probe is fixedly installed between two links of the caterpillar.

3. (Original) The apparatus according to Claim 1, wherein the movable means comprises a caterpillar consisting of a plurality of links each of which has a flat surface, a pair of rollers for internally supporting both longitudinal ends of the caterpillar, and a pair of supporting members for supporting both lateral sides of the caterpillar, the driving means is coupled to and rotates the caterpillar, and the at least one ultrasonic probe is fixedly installed between two links of the caterpillar.

4. (Previously presented) The apparatus according to Claim 1, wherein the ultrasonic probe is a phased array scanning type probe.

5. (Previously presented) The apparatus according to Claim 1, further comprising: a height adjusting means for supporting the frame in such a manner

Applicant: Hee-Boong Park
Application No.: 10/540,819

that the height of the frame can be adjusted; and a pressing means fixed to the height adjusting means to press the deformable object placed on the flat surface of the movable means.

6. (Original) The apparatus according to Claim 4, further comprising: a height adjusting means for supporting the frame in such a manner that the height of the frame can be adjusted; and a pressing means fixed to the height adjusting means to press the deformable object placed on the flat surface of the movable means.

7. (Original) The apparatus according to Claim 5, further comprising: a stand for supporting the height adjusting means; and a rotational shaft having one end supported rotatably by the stand and the other end fixed to a side surface of the height adjusting means, which is opposite to a side surface of the height adjusting means with the frame installed thereon.

8. (Previously presented) The apparatus according to Claim 2, wherein the ultrasonic probe is a phased array scanning type probe.

Applicant: Hee-Boong Park
Application No.: 10/540,819

9. (Previously presented) The apparatus according to Claim 3, wherein the ultrasonic probe is a phased array scanning type probe.

10. (Previously presented) The apparatus according to Claim 2, further comprising: a height adjusting means for supporting the frame in such a manner that the height of the frame can be adjusted; and a pressing means fixed to the height adjusting means to press the deformable object placed on the flat surface of the movable means.

11. (Previously presented) The apparatus according to Claim 3, further comprising: a height adjusting means for supporting the frame in such a manner that the height of the frame can be adjusted; and a pressing means fixed to the height adjusting means to press the deformable object placed on the flat surface of the movable means.

12. (Previously presented) The apparatus according to Claim 8, further comprising: a height adjusting means for supporting the frame in such a manner that the height of the frame can be adjusted; and a pressing means fixed to the height adjusting means to press the deformable object placed on the flat surface of the movable means.

13. (Previously presented) The apparatus according to Claim 9, further comprising: a height adjusting means for supporting the frame in such a manner that the height of the frame can be adjusted; and a pressing means fixed to the height adjusting means to press the deformable object placed on the flat surface of the movable means.

14. (Previously presented) The apparatus according to Claim 10, further comprising: a stand for supporting the height adjusting means; and a rotational shaft having one end supported rotatably by the stand and the other end fixed to a side surface of the height adjusting means, which is opposite to a side surface of the height adjusting means with the frame installed thereon.

15. (Previously presented) The apparatus according to Claim 11, further comprising: a stand for supporting the height adjusting means; and a rotational shaft having one end supported rotatably by the stand and the other end fixed to a side surface of the height adjusting means, which is opposite to a side surface of the height adjusting means with the frame installed thereon.

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Application No.: 10/540,819

16. (New) An apparatus for an ultrasonic examination of a deformable object comprising:

a supporting frame with respect to which a scanning surface is defined whereat the deformable object is disposed for scanning;

a movable support surface with rigidity widthwise, the movable support surface being installed in the frame to move forward and rearward at a certain moving distance in a longitudinal direction of the frame such that the moveable support surface fully supports the scanning surface at all times;

a driving means for moving the movable support surface forward and rearward; and

the movable support surface including an ultrasonic probe extending widthwise of the movable support surface having an ultrasonic wave transmission/reception surface substantially flush with an upper surface of the movable support surface such that the ultrasonic wave transmission/reception surface traverses the scanning surface when the movable support surface is moved.